

MONTANA'S AGRO-ENERGY PLAN

WIRED

YEAR 1 IMPLEMENTATION PLAN

June 27, 2006

1. Executive Summary:

Vision Statement: Central and Eastern Montana will have a stable population base with increasing prosperity that is supported by a globally competitive bio-products industry.

Purpose: The purpose of WIRED is to establish a globally competitive bio-energy and bio-products cluster in central and eastern Montana by utilizing existing cohesive partnerships and developing new partnerships with business and industry, education, community development organizations, state and tribal governments and philanthropic foundations.

Strategic Objectives: These partnerships will support the following strategic objectives:

- develop sustainable industry in rural central and eastern Montana
- create high-paying jobs in management, engineering, marketing, manufacturing and construction
- increase the net return and stability of farm income.

This vision and purpose is to be accomplished through a collaborative effort with Montana's Departments of Labor and Industry, Agriculture, Commerce, as well as the Governor's Office of Economic Development and the Office of the Commissioner of Higher Education.

Goals: Four primary goals have been identified for the transformation of the region. These goals have also been broken down into specific strategies and activities to be acted on to realize the transformation of the region. Our goals are as follows.

- Develop a world-class bio-products industry that catalyzes regional economic transformation from an agricultural commodity driven economy to a value added economy that supports regional prosperity in Eastern and Central Montana.
- Develop a highly trained and stable/growing workforce to support bio-products and other value-added agricultural products.
- Create an agile, integrated talent development system (workforce, education and economic development) that will prepare state residents to act quickly to take advantage of new economic opportunities and is responsive to business needs.

- Create an inclusive and sustainable regional identity and leadership structure that will promote innovation and ensure the long-term success of the transformational initiative.

Role of Tribal Nations: In addition to impacting the 32 county region generally, also inherent in each of the above goals is a focus on the six Indian reservations in the region. These reservations are separate governmental units from the traditional state-county relationship. As such they require a unique government-to-government approach with the state. By fully incorporating the Tribal Nations into the WIRED initiative the State of Montana can work in conjunction with these Tribal Nations to help transform the region generally and the reservation specifically. Each sovereign nation will determine the extent of their involvement in the WIRED initiative. To encourage participation an incentive has been developed for each tribal nation and a Town Hall outreach tour will visit each reservation to educate and inform individuals on the WIRED initiative. The tour will also be an opportunity to hear about opportunities and challenges facing each Tribal Nation. In order to successfully transform this region an impact must be made on the Indian reservations, as these populations often represent the highest rate of unemployment in the state. Crop conversion, increased entry to employment, and youth involvement are the three areas that the WIRED initiative must affect.

Governance: WIRED will be administered through the Montana Department of Labor and Industry (DLI). DLI has utilized the funding and internal control structures of the Montana Department of Commerce and the Office of the Commissioner of Higher Education as a means to distribute funds to grant applicants. These two agencies will provide application guidelines and subsequent initial review of all applications. Each agency will then determine who will be recommended for funding to the Executive Steering Committee (ESC). The ESC will be responsible for determining who will receive funding, and will have the power to require applicants to work in conjunction with other applicants, or alter their funding request to better serve the four primary goals of the region. The ESC is made up of a number of representatives from State government, including

- the Office of the Commissioner of Higher Education
- the Commissioner of the Montana Department of Labor
- the Director of the Montana Department of Agriculture
- the Chief Business Officer of the Governor's Office of Economic Development
- the Director of the Montana Department of Commerce.

ESC members will select two private sector representatives to serve on the ESC. The private sector representatives should have experience in one of the following areas agriculture production, financing, the energy sector, or the bio-products sector. The private sector representatives can not apply for grants or be involved in a business that is applying for funding or funded, as this would represent a conflict of interest. Each state agency was chosen because they represent an important area of focus of the bio-products industry.

The State Director for distribution of the Carl D. Perkins funds for the State of Montana is a member of the ESC. This position represents both Secondary and Postsecondary CTE for the State and functions as the liaison to the U.S. Department of Education. The new Carl D. Perkins Act will require a minimum of one career pathway to be developed in each institution and school receiving Perkins funds. All the public WIRED region institutions receive Perkins funds and two of the Tribal Colleges do as well. Most of the high schools in the area also receive these funds. This can be considered leveraged funds for the WIRED project. Also, any funding directed at K-12 will be secondary to the primary application. In other words, if a university or community college applies for funding and is accepted, they must work with the K-12 system to coordinate curriculum development and career pathways.

The Project Director, within the Department of Labor and Industry, will be the primary point of contact for WIRED. This individual will work with all interested parties as well as any individuals or organizations funded. Communication within the region will be vital to the success of the WIRED initiative, and will be the primary responsibility of the Project Director. All partner and funded organizations will be instructed to use and post information to the collaborative work space. As the grant progresses the Project Director will work with all the individuals involved in the WIRED grant to develop a number of small working groups or committees to discuss the progress and possibilities of WIRED in their field of expertise, e.g. *Industry, Education, Research, Economic development, Agriculture producers, Finance*. The development of the working groups and the use of the collaborative work space will allow the Project Director an effective tool to manage communication within the region.

By harnessing the previous work of individuals within the region and developing a system by which government and education can better serve the needs of industry a framework for sustainable transformation will be established.

2. Goals and Strategies:

Four primary goals have been identified for the transformation of the region. These goals have also been broken down into specific strategies and activities to be acted on to realize the transformation of the region. Our goals are as follows:

1. Develop a world-class bio-products industry that catalyzes regional economic transformation from an agricultural commodity driven economy to a value added economy that supports regional prosperity in Eastern and Central Montana.
2. Develop a highly trained and stable/growing workforce to support bio-products and other value-added agricultural products.
3. Create an agile, integrated talent development system (workforce, education and economic development) that will prepare state residents to act quickly to take advantage of new economic opportunities and is responsive to business needs.

4. Create an inclusive and sustainable regional identity and leadership structure that will promote innovation and ensure the long-term success of the transformational initiative.

To successfully achieve our desired goals we have outlined a number of key strategies and activities to pursue.

Market Assessment: An initial review of the bio-products industry will be critical to evaluating the regions position as well as the regions competitive advantages. This will be accomplished by collecting market data which will be compiled into a market map. Once this data has been collected it will be possible to run a financial analysis on the market and determine the primary areas of interest to the region.

Outreach: Outreach to producers and investors in the initial phase of the WIRED initiative will aid in the adoption of innovative agricultural practices and build a network of capital for future private investment within the region. A community outreach tour is planned for the area that will focus on educating growers on the alternative crops that can be utilized as well as the market potential for such alternative crops.

Business Innovation Centers: To sustain the engagement of producer and local communities, and provide a resource for information, the DOC and the DOA are exploring the possibility of entering into a Memorandum of Understanding to create multiple Bio-product Business Innovation Centers around the region. These regional centers would provide technical assistance through trained personnel to agricultural producers, private entrepreneurs, university officials and others interested in developing projects to enhance the rural economy of these areas through bio-based and value-added agricultural ventures. Funding a demonstration project will also aid outreach efforts, as it will show the regions actual progression in the bio-products industry.

Global Research and Development Analysis: The bio-products industry in Montana is currently focused primarily on research and development. To utilize this framework and maintain a competitive advantage in research and development an analysis of the current research and development being done around the world will be conducted. This research will provide an insight into possible market trends as well as new innovations that may be on the way. This will provide a framework for further R&D within the region, as well as identify where Montana has a competitive advantage within the industry.

Bio-Products Career Maps: The initial step needed to develop educational and workforce skill set tools that will lead to job growth is a career map for the bio-products industry. This will present an overarching diagram of the multiple careers that will be involved in the industry and the skills and education needed. With this framework in place, the development of career pathways, entrepreneurial curriculum, and educational curriculum can take place. A critical component of workforce skill set development and educational curriculum development is the cooperation of industry representatives. It will be imperative as the industry develops that representatives from within the industry and from within associated industries work with the emerging cluster hubs to develop tailored workforce programs. This relationship will be developed through the application

process. Private industry will be encouraged to work cooperatively with regional cluster hubs. Curricula, programs, and services should be influenced by current and emerging needs of the industry, as best articulated by the leaders, innovators, and by best practices, not by political considerations.

Cluster Hubs: Montanans for Bioproduct Development will support the development of Cluster Hubs, which serve as a tool for connecting academic, technical, and employability skills in conjunction with learners' career planning. Cluster Hubs serve as a framework or model to help learners transition from one educational level to another. For example, clusters help to connect career exploration in middle school with in-depth exposure to a cluster in 9th and 10th grade, moving to more specific skills in secondary and postsecondary education/training. Career Clusters also serve as a tool for connecting an adult's existing skills with new and emerging job opportunities as well as identifying new skill sets that need to be added to existing skills.

Activities that promote pathways include:

- career advisement beginning in middle school or earlier,
- curriculum road maps jointly produced by educators and employers showing the connections between education and training programs and jobs in a given sector at different levels
- creation of accelerated learning opportunities such as dual enrollment
- easy articulation of credits across educational institutions through collaborative efforts to enable students to progress “seamlessly” from one level to the next

Talent and Workforce System Transformation: To reach our goal of transformation it is necessary to implement a system wide change in how government works cooperatively on the issues of workforce skill set development, education, and economic development. The system that will be developed for the bio-products industry will be a framework that will benefit multiple industries in the years to come. The vision for this framework is that all agencies work in coordination to find innovative solutions to issues facing the private sector. An example of this coordination could be a company that is working with the Governor's Office of Economic Development on locating in Montana. An issue of importance to the company is workforce development and training. To address this concern the Office of Economic Development organizes a meeting with the Department of Labor, the Department of Commerce, the Office of the Commissioner of Higher Education, and the company. At the meeting all agencies can respond to the company's questions and develop a plan to deliver customized workforce development and training. Each agency brings resources and expertise to the table, resulting in a coordinated effort for the remainder of the project. This system, or way of doing business, not only coordinates the states response to a companies inquiry, it also shows the company that the state will be working together to provide innovative solutions that cross state agencies.

3. Governance:

WIRED will involve 5 State agencies, the Department of Commerce, the Department of Labor and Industry, the Office of the Commissioner of Higher Education, the Department of Agriculture, and the Governor's Office. WIRED funds will be distributed to three of those departments working together within Montana State Government.

DLI: The Department of Labor and Industry is the lead organization. It will be responsible for administration of the grant as well as the fiscal management of the overall project. The Department of Labor and Industry will also utilize the existing framework of the workforce training one-stop centers to aid in guiding the delivery of workforce development services in local communities, maintaining program delivery systems, performance standards and reporting, and internal performance review. The Workforce Centers will provide case management for individuals enrolled in training. The Workforce Services Division will collect, manage, and submit performance data on behalf of the project, including common measures, and will provide regional labor market information. The division can leverage other federal training programs and provide appropriate referrals in the workforce investment system within the region.

OCHE: The Office of the Commissioner of Higher Education is managing a WIRED grant program, under contract from the Montana Department of Labor and Industry, involving two-year colleges and K-12 programs that has approximately \$1.2 million for the first year, although this amount may vary in years two and three depending upon the future curriculum and training needs. These funds will be used to establish a network of Bio-products Industry Cluster Hubs in two and four-year colleges located within the targeted region and to establish Manufacturing Career Cluster Models relevant to the Bio products Cluster.

The functions of a Bio Energy Industry Cluster Hub include: development of new curricula using direct industry input; monitoring cluster trends and assessing needs; creating skills standards as needed; facilitate workplace learning; promote cluster-related entrepreneurship; conduct global benchmarking; advance cooperation among all levels of the education system; host and deliver complementary services; and establish a clearinghouse for cluster information and resources.

The funds within the Office of the Commissioner of Higher Education will also be used to establish Manufacturing Career Cluster Models relevant to the Bio-products Cluster and will include individual schools and/or districts as partners. Other organizations and agencies that serve the adult learner may be included as partners. Although the funds will be distributed to postsecondary institutions through a competitive process, a required priority will be to engage one or more secondary schools as sub grantees for the coordinated development of pathways in the targeted bio-products industry and related occupations

DOC: The Department of Commerce is managing a grant program under contract with Montana Department of Labor and Industry, the Grantee, to implement part of WIRED initiative. The Commerce WIRED program has available for year one \$3,418,278 in

grant funds for customized worker training to businesses working with universities, colleges, high schools, and other training providers on specialized training and curriculum development and for bio-product business assistance, bio-product research and development, and other bio-product development projects or programs that will enhance and expand the bio-product industry in the region.

The program will also provide grants for eligible job training programs or projects that will enhance and expand the bio-product industry in the region. The Department of Commerce will make a recommendation to the steering committee on the amount of WIRED funds to be granted to a bioproduct business for job training, based on the eligibility of job training costs proposed. The amount considered by the Department of Commerce will be based on the demonstrated needs, potential sources of leveraged funds, and will be heavily based on the amount of job training required. Applicants are expected to have matching funds. An application must conclusively demonstrate the need for the amount requested. The Department will review the business plan and financial statements submitted, the hiring and training plan, and assess the proposed sources and uses of funds to determine the amount of WIRED funds granted to successful applicants. Projects must be able to demonstrate a significant positive impact on the local area and within the region. The Department will consider the size of the business proposal, in terms of jobs created or retained and the need for job training funding, relative to the community size when reviewing proposals.

DOA: The Department of Agriculture is involved in the organizational structure of the WIRED grant, although they are not at this time a funded agency. The Department will play a key role in outreach and education, research and development, and agriculture production expansion. For year one the Department of Agriculture has not been allocated funds, however they are eligible to receive funding from the Department of Commerce. To receive funding the DOA must submit a Memorandum of Understanding detailing the proposed use of the funds. This MOU must then be approved by the ESC. Future funding reallocations could go to develop a program that works in conjunction with the currently active Growth through Agriculture (GTA) program in the department. The GTA program is focused on funding yearly stage entrepreneurial business activities that add value to agricultural products. A strong correlation between the WIRED initiative and GTA exist, and that is why a Department of Agriculture WIRED program may be developed for year 2. The new program would continue with the focus of developing new agricultural bio-products and processes through private-public partnerships.

Governor's Office: The Governor's Office plays two key roles in WIRED governance. First, the Governor's Office is the main organization under which all WIRED activities occur. Funds were request and received through the Governor's Office and the Governor's Office has worked diligently to garner support throughout State government and the region. Second, the Governor's Office represents the avenue of input from the State Workforce Investment Board. This relationship between SWIB and the Governor's Office is well established and of high value to the WIRED project.

SWIB: The **State Workforce Investment Board** is responsible for advising the Governor on the creation, implementation and continuous improvement of a comprehensive statewide workforce development system, designed to train the maximum number of unemployed and underemployed Montanans as possible.

4. Operations:

Decision making authority and approach

The Department of Commerce and the Office of the Commissioner of Higher Education will accept requests for funding. The requests will be evaluated within the respective department and a recommendation will be submitted to the Executive Steering Committee. The Executive Steering Committee is made up of the Director of the Department of Agriculture, the Commissioner of the Department of Labor and Industry, the Director of the Department of Commerce, the Commissioner of the Office of the Commissioner of Higher Education, the Chief Business Officer from the Governor's Office of Economic Development, and two individual selected from the private sector. The Executive Steering Committee will be responsible for determining which projects will be funded, and at what level. The Executive Steering Committee will also be able to suggest revisions to the proposal and designate specific provisions that must be satisfied in order for a given proposal to receive funding. This will enable the Executive Steering Committee to better utilize and coordinate the resource and partnerships in the region.

Operating Plans

Communications/ESC/Project Director: The center of the communication infrastructure is the Executive Steering Committee. The Executive Steering Committee, through the network of partners has ties to all the stakeholders in the region. This committee is also the back bone of the communication infrastructure within the multiple state agencies involved in the WIRED grant. The Project Director will meet with the ESC on a regular basis to report on the status of WIRED and receive feed back from the ESC members.

The Project Director will be the primary point of contact for all organizations being funded and all partner organizations. Any organization that has received funding will be instructed on the use of the WIRED collaborative work space and instructed to periodically post updates on the progress of their project. All partner organizations will be instructed to use and post information to the collaborative work space. As the grant progresses the Project Director will work with all the individuals involved in the WIRED grant to develop a number of small working groups or committees to discuss the progress of WIRED in their field of expertise. (*Industry, Education, Research & Development, Economic development, Agriculture producers, Finance*) The majority of these working groups will be established later in the grant lifecycle, as they will be more effective as the

WIRED is better established. It will be determined at a later date the manner in which these groups will be operationalized.

Only two working group will be established in the initial year, the Industry group and the Research and Development group. The Industry group will be formed as a committee under the SWIB. By forming the working group in this manner it will allow for easy flow of information from the private sector to the ESC, as four members of the ESC sit on the board of the SWIB and the group will report directly to the ESC on a quarterly basis. The members of the Industry group will be selected by the ESC and will have experience in the bio-products industry or affiliate industries, such as transportation, construction, mining, finance, and forestry industries. The committee members do not have to sit on the SWIB, and can be grant applicants or awardees. The industry group will advise the ESC on the opportunities and challenges they see the bio-product industry facing and the role they see state government playing in those issues.

Internal Controls: A significant number of internal controls are inherently in place due to the placement of WIRED funds within the various units of state government that will be responsible for them (DLI, DOC, OCHE). In other words, because of the typical yet significant financial and programmatic controls (checks and balances) that are in place in these state government agencies, the federal government's investment will be administered appropriately and will be accounted for in a sound fiscal manner. The controls are discussed in more depth below.

The Department of Commerce has set up the following internal control measures. A minimum match requirement of one new cash dollar from unexpended grants, loans, and/or new equity for each dollar of WIRED funds requested. Projects that provide significantly higher match as leverage for the project are more likely to be funded and have applications processed more quickly. It is anticipated that grants to businesses be leveraged at a much higher rate than the minimum 1:1 and involve multiple partners to be seriously considered by the ESC. Possible partners include two-year colleges, universities, Montana Agriculture Experiment stations, tribes, and other private industries. The Department may consider lower match amounts only in very unique cases where significant need and circumstances warrant additional consideration and are documented by the applicant.

The application must include executive summaries on letterhead from each partner explaining the level of commitment to the project, activities to be conducted and anticipated costs and justification.

Each application must include a business plan containing information that is sufficient for the Executive Steering Committee to obtain an adequate understanding of the business to be assisted, including the products or services offered, the estimated market potential, management experience of the principals, current financial position, and details of the proposed venture. In lieu of a business plan, the committee may consider a complete current copy of the current loan or application to entities such as the Montana Board of Investments, the federal Business and Industry Guarantee program, the Small Business

Administration, and other Department of Commerce programs if the information provided is sufficient for the Department to make a decision.

The financial information submitted must demonstrate that the business to be assisted is or will be an ongoing viable company that can achieve and maintain the amount of employment projected. The ESC reserves the right to request additional information or accept reasonable variations from the information requirements listed above on a case-by-case basis if necessary to make a funding decision. For an existing business, provide financial statements for the two most recent years of operation that includes the following:

- Balance Sheets
- Profit and Loss Statements
- Cash Flow Statements

Business start-ups and businesses operating for less than three years must provide all available financial statements. If the last complete fiscal year of the business ended 90 days or more before the application is submitted, interim financial statements should be submitted in addition to the year-end financial statements.

There should not be gaps between the historical statements and the projected statements. The projections should use the same fiscal year periods as the historical financial statements and incorporate all of the sources and uses of funds involved in the business project. Applications that contain appropriate, updated, accurate financial information can be processed much more quickly than incomplete applications that require requests for additional information. At a minimum the Hiring and Training Plan must include the following:

- A detailed description of the training curriculum and resources.
- A breakdown of jobs to be created or retained, including the number and type of jobs that are full-time, part-time, skilled, semiskilled, or unskilled positions. For applications proposing positions involving less than full-time employment, an estimate of the number of hours to be worked each week or the number of months to be worked each year for each position must be included.
- Pay levels and benefits for each job category anticipated.
- A timetable for creating the jobs and the total number of persons to be hired and trained.
- An assurance that the business will comply with the equal opportunity and nondiscrimination laws.
- Procedures for outreach, recruitment, screening, selection, training and placement of workers, especially local area job applicants.
- Written commitments from any agencies or organizations participating in the implementation of the hiring plan (e.g., Workforce Centers).

The Office of the Commissioner of Higher Education has also developed internal controls within the Application Guidelines that applicants must abide by to receive funding. The applicant must be a two-or four-year public institution located within the 32 county WIRED region. The application must be submitted as a single administrative package by the lead institution responsible for the overall management of the partnership activity with administrative responsibility for the proposed effort. The applicant must establish agreements with other academic institutions and K12 schools as sub grantees. The sub grantee does not have to be located within the WIRED region, although it is encouraged. Rationale for including partners not located within the WIRED Region must demonstrate the benefit to the project. Other partners may include not-for-profit organizations, private sector organizations, entrepreneurs, state and local government entities, trade and professional associations as necessary to accomplish the objectives of the grant.

A description of the measurable methods to be used to determine the effect of each objective in accomplishing the project must be included. Applicant must indicate when evaluations will occur during the project period, who will collect the data, and how it will be collected and measured. Also, the applicant must describe how the federal funds requested will be expended to achieve project objectives through the activities to be performed and describe what expenditures will be made in Personal Services/Salaries and Benefits, Operating Expenses and Equipment budget categories. If Indirect Costs are being requested (up to 5% of the Personnel and Operating Expenses categories), documentation of the Recipient's approved restricted indirect cost rate. A description of other funds, if any, will be used to achieve project objectives must be included. A specific statement must be made on non-supplanting of local or state funds.

Communication and Outreach strategies

Local Community and Producer outreach tour – At a date yet to be determined the Department of Labor and Industry will partner with the Department of Agriculture to develop an Outreach tour for the region. The tours goal will be to educate members of the local communities throughout the region on the focus of the WIRED program and how it relates to them. To ensure a successful event we will work with each individual community to find the organization or individual best suited to aide in the development of a successful outreach stop. Organizations involved will depend on each specific location but may include some or all of the following; Local and Regional Economic Development Organizations, Montana Farmers Union, Montana Grain Growers, Pulse Growers, local Chambers of Commerce, local private companies, local K-12 institutions, community colleges, colleges of technology, tribal colleges, universities, vocational schools, entrepreneurs, investors, and/or the local government's governing body and Mayor or chief executive. It will be crucial for both organizations to utilize these strategic partnerships within the region to draw financial support as well as programmatic support for the event. Grass roots support of this transformation will be a significant component of success and this outreach will represent the initial step to build grass roots support at the local community level.

Montanans for Bioproduct Development page, hosted by the Department of Labor and Industry, <http://dli.mt.gov/wired/wired.asp> . This page will be utilized as a link to application guidelines and other general WIRED information.

5. Budget Allocations and Fiscal Management:

Budget mapped to prioritize WIRED goals

The Office of the Commissioner of Higher Education will be managing the WIRED grant program under contract with the Department of Labor and Industry, involving two year colleges and K-12 programs and will have approximately \$1.2 million for year one and may vary in years two and three.. Application Guidelines are to be released August 31, 2006 with a due date of September 29, 2006.

The Department of Commerce is managing a grant program under contract with Montana Department of Labor and Industry, the Grantee, to implement part of the WIRED proposal. The grant program has \$3,418,278 available for year one in grant funds for customized worker training to businesses working with universities, colleges, high schools, and other training providers on specialized training and curriculum development. This amount may differ for years two and three. The program will also provide grants for WIRED eligible job training programs or projects that will enhance and expand the bio-product industry in the WIRED region.

Three major components that require initial funding include research and development, producer outreach and education, and customized job training. These three components represent an essential initial investment in the bio-products industry. As the industry is in the early stage of development in Montana it is essential that we work with private industry to aid in the expansion of the bio-products industry. Leveraging WIRED funds will be instrumental in the development of this industry in Montana. This expansion will create the demand for workforce training, curriculum development, and increased agricultural production.

Producer outreach will also be an essential initial investment of the WIRED funds. Educating producers on the state of the industry as well as the vision of the WIRED program will build confidence and aid in the adoption of alternative crops. It is also imperative that we discuss the research and development component with producers so that they understand that we are addressing their concerns and working to solve them.

The research and development component is an essential early stage investment that will yield benefits to the industry cluster and producers in the years to come. Montana must continue to look at innovative solutions for the bio-products industry so that we may remain on the cutting edge, thus providing private industry in Montana the necessary competitive advantages to compete on a local, national, and global scale.

6. Anticipated Technical Assistance Requests:

In order of importance:

1. Bio-products / Bio-fuels market analysis
2. Bi-product research/market – identify the bi-product uses, markets, opportunities, and R&D that is occurring around the bi-products of the bio-product industry (example; **glycerin** is a bi-product of Biodiesel production as is **feed meal**)
3. Global Research and Development analysis – An analysis of the current state of R&D occurring around bio-energy and bio-products. What cutting edge R&D is happening in the bio-products industry.
4. Bio-product industry career map
5. Cluster strategies – Best practices for cluster development and growth
6. Curriculum Development – Best practices of curriculum development/implementation
7. Experiential Learning – on-the-job training correlated to credit-bearing courses
8. DOD guidelines, contracting, and opportunities for the region – How does the region position itself to work with the DOD on R&D, testing, future initiatives, and contracting for products.
9. Economic Multiplier – Research similar industries to the bio-products and determine what industry economic multiplier will best represent the bio-products industry.